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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,942	08/25/2000	Stephen B. Crain	CJM 9637	6282
321	7590	10/09/2003	EXAMINER	
SENNIGER POWERS LEAVITT AND ROEDEL ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			COURSON, TANIA C	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/648,942

Applicant(s)

CRAIN ET AL.

Examiner

Tania C. Courson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 34-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-30 and 37 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 11, 14, 16 and 34-36 is/are rejected.
- 7) ☒ Claim(s) 5, 7-10, 12, 13 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 6 and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Shanks et al. (US 5,425,452).

Shanks et al. discloses in Fig. 1, a carrying device comprising:

With respect to claims 1 and 35:

- a) at least one pole section (Fig. 1, tapered shaft 16);
- b) a point (Fig. 1, pointed attachment 16A) mounted on a lower end of said one pole section (Fig. 1);
- c) a shoe (Fig. 1, pointed end cover 16B and column 3, lines 59-64);
- d) the shoe having a blunt bottom wall (Fig. 1) engageable with the ground/surface (column 3, lines 59-64) and having a greater surface area than the point (Fig. 1), where the shoe covers the point (Fig. 1).

With respect to claim 6:

- a) wherein the bottom wall is flat (Fig. 1) and has a surface area (Fig. 1).

With respect to claims 34 and 36:

- a) wherein a distal end of the point is closely adjacent to the bottom wall (Fig. 1).

With respect to the preamble of the claims 1-2, 6 and 34-36: the preamble of the claim has not been given any patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self – contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

With respect to claims 1-2, 6 and 34-36: with respect to the intended use of the apparatus, e.g. for use in locating a position, for engaging in the ground, for covering the point, for releasable connection of the shoe, for engaging soft terrain, when the shoe is connected, for precise location, for selective connection, for engagement with the surface, for engaging the surface: It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

With respect to claims 1 and 34-35: It has been held that the functional “whereby” statement does not define any structure and accordingly can not serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanks et al.

Shanks et al. disclose a carrying device, as stated above in paragraph 2.

Shanks et al. further disclose the point and the shoe being interchangeable (Fig. 1).

Shanks et al. do not disclose a point and a shoe each having threads formed thereon and a shoe made of polymeric material.

With respect to claim 3: Shanks et al. disclose a point and a shoe, each which are interchangeable (column 3, lines 59-64). The use of the particular type of connection for interchangeability claimed by applicant, i.e., a point and a shoe each having threads, absent any criticality, is considered to be nothing more than a choice of engineering skill, choice or design because 1) neither non-obvious nor unexpected results, i.e., results which are different in kind and not in degree from the results of the prior art, will be obtained as long as the point and the shoe are interchangeable, as already suggested by Shanks et al., 2) the connection for interchangeability claimed by Applicant and the connection for interchangeability used by Shanks et al. are well known alternate types of connection for interchangeability which will perform the same function, if one is replaced with the other, of connecting a point and a shoe to allow for interchangeability, and 3) the use of the particular type of connection for interchangeability by Applicant is considered to be nothing more than the use of one of numerous and well known alternate types of connections for interchangeability that a person

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having ordinary skill in the art would have been able to provide using routine experimentation in order to connect a point and a shoe to allow for interchangeability as already suggested by Shanks et al.. Therefore, one skilled in the art would use an alternate type of the connection for interchangeability in order to suit the needs of the user of the device.

Regarding claim 4: Shanks et al. disclose the shoe (Fig. 1, pointed end cover 16B and column 3, lines 59-64) made of a durable material. The particular type of material used to make the shoe, absent any criticality, is only considered to be the use of a “ preferred ” or “ optimum ” material out of a plurality of well known materials that a person having ordinary skill in the art at the time the invention was made would have find obvious to provide using routine experimentation based, among other things, on the intended use of Applicant’s apparatus, i.e., suitability for the intended use of Applicant’s apparatus. See In re Leshin, 125 USPQ 416 (CCPA 1960) where the court stated that a selection of a material on the basis of suitability for intended use of an apparatus would be entirely obvious.

5. Claims 1-4, 6, 11 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall (US 4,339,880) in view of Shanks et al.

Hall discloses a surveying pole device, including the following:

With respect to claims 1 and 35:

- a) at least one pole section (Fig. 6, tubular section 66);
- b) a point (Fig. 6, point 86) mounted on a lower end of said one pole section (Fig. 6), and;

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- c) a shoe (Fig. 6, pole section 68 and pin 92).

With respect to claim 11:

- a) wherein said one pole section constitutes a first pole section (Fig. 6);
- b) the surveying pole (Fig. 6) further comprising a second pole section (Fig. 6, tubular section 64) telescopically received in the first pole section (Fig. 6)

Hall does not disclose a shoe having a blunt bottom wall engageable with the ground/surface and having a greater surface area than the point, where the shoe covers the point, wherein the bottom wall is flat and has a surface area, wherein a distal end of the point is closely adjacent to the bottom wall, a point and a shoe each having threads formed thereon and a shoe made of polymeric material.

Shanks et al. teach a carrying device that consists of a shoe having a blunt bottom wall (Fig. 1, pointed end cover 16B and column 3, lines 59-64) engageable with the ground/surface (column 3, lines 59-64) and having a greater surface area than the point (Fig. 1), where the shoe covers the point (Fig. 1), wherein the bottom wall is flat (Fig. 1) and has a surface area (Fig. 1), wherein a distal end of the point is closely adjacent to the bottom wall (Fig. 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the surveying pole device of Hall, so as to include a shoe having a blunt bottom wall, as taught by Shanks et al., so as to provide a means for protecting the point during use of the device.

With respect to claim 3: Hall disclose a point and a shoe, each which are interchangeable (Fig. 6). The use of the particular type of connection for interchangeability claimed by applicant, i.e., a point and a shoe each having threads, absent any criticality, is considered to be nothing more than a choice of engineering skill, choice or design because 1) neither non-obvious nor unexpected results, i.e., results which are different in kind and not in degree from the results of the prior art, will be obtained as long as the point and the shoe are interchangeable, as already suggested by Hall, 2) the connection for interchangeability claimed by Applicant and the connection for interchangeability used by Hall are well known alternate types of connection for interchangeability which will perform the same function, if one is replaced with the other, of connecting a point and a shoe to allow for interchangeability, and 3) the use of the particular type of connection for interchangeability by Applicant is considered to be nothing more than the use of one of numerous and well known alternate types of connections for interchangeability that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to connect a point and a shoe to allow for interchangeability as already suggested by Hall. Therefore, one skilled in the art would use an alternate type of the connection for interchangeability in order to suit the needs of the user of the device.

Regarding claim 4: Hall disclose the shoe (Fig. 6, (Fig. 6, pole section 68 and pin 92) made of a durable material. The particular type of material used to make the shoe, absent any criticality, is only considered to be the use of a “ preferred ” or “ optimum ” material out of a plurality of well known materials that a person having ordinary skill in the art at the time the

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invention was made would have find obvious to provide using routine experimentation based, among other things, on the intended use of Applicant's apparatus, i.e., suitability for the intended use of Applicant's apparatus. See In re Leshin, 125 USPQ 416 (CCPA 1960) where the court stated that a selection of a material on the basis of suitability for intended use of an apparatus would be entirely obvious.

With respect to claims 1-4, 6, 11 and 34-36: with respect to the intended use of the apparatus, e.g. for use in locating a position, for engaging in the ground, for covering the point, for releasable connection of the shoe, for connecting the shoe, for engaging soft terrain, for extension and retraction, when the shoe is connected, for precise location, for selective connection, for engagement with the surface, for engaging the surface: It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

With respect to claims 1 and 34-35: It has been held that the functional "whereby" statement does not define any structure and accordingly can not serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957).

With respect to the term " adapted for" in claim 11: Hall discloses a surveying pole device which is considered to be " adapted for " releasable, snap-together connection with the first pole section as stated in the claim. Furthermore, the term "adapted for " is similar to the

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term “adapted to” of which has been held to make what follows a functional statement and not a positive limitation because it has been held that the recitation that an element is “ adapted to ” perform a function only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

6. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall and Shanks et al, as applied to claims 1-4, 6, 11 and 34-36 as stated above, and further in view of Newman Sr. et al. (US 5,385,420) and Suverkrop (US 2,594,823).

Hall and Shanks et al. disclose a surveying pole device, as stated above in paragraph 5.

Hall and Shanks et al. further disclose a point comprising a body (Fig. 6), a tip (Fig 6) and the body having a cavity (Fig. 6), a fitting received in and substantially closing an end of said one pole section (Fig. 6, connecting shaft 72), the fitting including an axially facing surface having a surface area and facing axially outward from said one pole section (Fig. 6),

Hall and Shanks et al. do not disclose an axially facing surface including a peripheral engagement portion constituting a first smaller portion of the axially facing surface area and an axially recessed portion constituting a second larger portion of the surface area recessed axially from the peripheral engagement portion and a spare tip.

Newman, Sr. et al. teach a connector device that consists of an axially facing surface including a peripheral engagement portion constituting a first smaller portion of the axially facing surface area (Fig. 4) and an axially recessed portion constituting a second larger portion of

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the surface area recessed axially from the peripheral engagement portion (Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the surveying pole device of Hall and Shanks et al., so as to include a connector device having a first smaller portion of an axially facing surface and a second larger portion of a recessed surface area, as taught by Newman, Sr. et al., so as to provide increase the ability to quickly change additional devices added to the end of the section.

Suverkrop teaches a plum bob that consists of a spare tip (Fig. 2, replacement point 6). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the surveying pole device of Hall and Shanks et al., so as to include a spare tip, as taught by Suverkrop, so as to provide a means for reliability of the tip should the tip be accidentally lost or damaged during use of the device.

With respect to claim 16: with respect to the intended use of the apparatus, e.g. for releasable interconnection with the body, to hold the spare tip. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Allowable Subject Matter

7. Claims 17-30 and 37 are allowed.

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8. Claims 5, 7-10, 12-13, 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art cited on PTO-892 and not mentioned above disclose pole devices:

Rushing et al. (US 5,148,641)

Johnson (US 3,239,176)

Glidden et al. (US 3,195,234)

Segelhorst (US 2,002,756)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania C. Courson whose telephone number is (703) 305-3031. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez, can be reached on (703) 308-3875. The fax number for this Organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



DIEGO F.F. GUTIERREZ
SUPERVISORY PATENT EXAMINER
GROUP ART UNIT 2859

TCC
September 24, 2003